The Bean Bag

A newsletter to promote communication among research scientists concerned with the systematics of the Leguminosae/Fabaceae

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FROM THE EDITOR

Barbara Mackinder

The Bean Bag is designed to promote communication among research scientists concerned with legume systematics. To achieve this goal The Bean Bag is issued each year and features six columns: From the Editor, News (meetings, major events, announcements, etc.), Latin American Legume Report (nothing to report this year), Nodulation and Nitrogen Fixation, Gleanings, and Recent Legume Literature. Data in the Gleanings column are derived from questionnaire sheets which Readers complete and return. If you have news about legume systematics, send it to us for this column. The Recent Legume Literature column contains published research papers of specific interest to Bean Bag Readers and is derived from Readers contributions in conjunction with references from The Kew Record (RBG Kew's current awareness list of taxonomic literature). Recent is defined as up to 18 months old. Specific interest to Bean Bag Readers is defined as research papers of interest to a worldwide group of legume systematic botanists.

Bean Bag Readers are encouraged to send notices, observations, etc.

The Bean Bag can be delivered to readers via e-mail. If you wish to have your copies e-mailed to you, please send an email message to the editor (email: B.Mackinder@rbgkew.org.uk). New readers please provide your title, first and last names, full postal address and area(s) of interest.

Electronic copies of the current and past issues of The Bean Bag can be viewed on the World Wide Web server of the Royal Botanic Gardens, Kew, UK at http://www.rbgkew.org.uk/herbarium/legumes/beanbag.html

Bean Bag address:

Mrs B. Mackinder, Bean Bag Editor, Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, United Kingdom.

email: b.mackinder@rbgkew.org.uk



NEWS

The Rupert Barneby Award

James L. Luteyn

The New York Botanical Garden is pleased to announce that Rodrigo Duno de Stefano, of the Centro de Investigación Científica de Yucatán A. C. (CICY) is the recipient of the Rupert Barneby Award for the year 2006. He will be studying the family Leguminosae in the Yucatan Peninsula Biotic Province (YPBP), Mexico. With about 60 genera and more than 260 species there, the Leguminosae are one of the most important plant elements of the Yucatan region. This study will also contribute to a revision of four legume genera for the "Illustrated Flora of the Yucatan Peninsula" (G. Carnevali, general editor).

The New York Botanical Garden now invites applications for the Rupert Barneby Award for the year 2007. The award of US\$ 1,000.00 is to assist researchers to visit The New York Botanical Garden to study the rich collection of Leguminosae. Anyone interested in applying for the award should submit their curriculum vitae, a detailed letter describing the project for which the award is sought, and the names of 2-3 referees. Travel to the NYBG should be planned for sometime in the year 2007. The application should be addressed to Dr. James L. Luteyn, Institute of Systematic Botany, The New York Botanical Garden, 200th Street and Kazimiroff Blvd., Bronx, NY 10458-5126 USA, and received no later than December 1, 2006. Announcement of the recipient will be made by December 15th.

Anyone interested in making a contribution to THE RUPERT BARNEBY FUND IN LEGUME SYSTEMATICS, which supports this award, may send his or her cheque, payable to The New York Botanical Garden, to Dr. Luteyn.

The name Acacia: an update

Barbara Mackinder

As discussed in *The Bean Bag* 2005 (see under "The future of *Acacia*"), a proposed change to the use of the name *Acacia* was to be adopted at the International Botanical Congress (IBC) in Vienna in July 2005. During the nomenclatural section of the IBC, the part of the Report of the General Committee which supported the change was the subject of a separate debate, in response to the many parties concerned by the far-reaching implications of the proposed change. A card vote was taken, giving a close result of 54.9% votes cast in favour of no change, i.e. continuing with the current usage of the name *Acacia*, but a 60% majority was required to overturn the findings of the General Committee, hence retypification of *Acacia* with an Australian type was approved.

Legumes of the World

Gwilym Lewis

A new book, Legumes of the World edited by Gwilym Lewis, Brian Schrire, Barbara Mackinder and Mike Lock was published in July 2005 and is the first authoritative, illustrated guide to the world's legume genera. All 727 genera are illustrated, some for the first time with over 1100 photographs, paintings and line drawings. The introductory chapters cover nomenclature, classification including a supertree of the family, advances in systematics since Polhill (1994), economic importance of the family, complete synopsis of the genera and an overview of legume biogeography. The 36 tribal accounts have been prepared by 20 legume experts and are arranged in the most up to date classification system. For each genus, number of species, geographical distribution, etymology, habit, ecology, economic uses and selected references are given. Legumes of the World was published by the Royal Botanic Gardens, Kew and is available from www.kewbooks.com ISBN 1 900347 80 6. 577pp. Retail price is £55.00 (plus postage and packaging).

XVII International Botanical Congress (IBC)

The seventeenth IBC was held on 17 – 23rd July, 2005 in Vienna, Austria at which a legume symposium entitled the application of legume phylogenies to testing evolutionary, ecological, and biogeographic hypotheses was organized by Anne Bruneau and Melissa Luckow. The six speakers delivered the following papers:

Using phylogenies to realign taxa in an emerging new classification of Leguminosae - G.P. Lewis.

Newly recognised succulent biome: key to the origin and global distribution of Leguminosae? - B.D. Schrire.

Early floral development in Papilionoideae and its phylogenetic interpretation - G. Prenner.

Phylogenetic analysis of floral ontogenetic and molecular characters in the Caesalpinioideae: insights into floral evolution in the basal Leguminosae - A. Bruneau.

The evolution of bird pollination in Australian pea-flowered legumes - M.D. Crisp.

Phylogeny, gene duplication, and polyploidy in legumes - J.J. Doyle.

No symposium publication is planned.

NODULATION AND NITROGEN FIXATION

The following species of Mimosa and Cyclopia, not recorded in Sprent (2001) have fully authenticated reports of nodulation

Janet Sprent

Taxon	Status	Source ²
Mimosa adenocarpa Benth.	+	1
Mimosa borealis A. Gray	+	1
Mimosa delicatula Baill.	+	1
Mimosa hexandra M. Micheli	+	1
Mimosa himalayana Gamble	+	1
Mimosa latispinosa Lam.	+	1
Mimosa menabeensis R.Viq.	+	1
Mimosa uruguensis Hooker & Arn.	+	1
Cyclopia buxifolia (Burm. F.) Kies	+	2
Cyclopia galioides (Berg.) DC.	+	2
Cyclopia genistoides (L.) R.Br.	+	2
Cyclopia intermedia E.Mey.	+	2
Cyclopia meyeriana Walp.	+	2
Cyclopia plicata Kies	+	2
Cyclopia sessiliflora Eckl. & Zeyh.	+	2
Cyclopia subternataVogel	+	2

¹ James, E.K., Chen, W-M., Elliott, G.N., Chou, J-S., Wand, H-C., Sheu, S-Y, Moulin, L, Bessi, R, de Faria, S.M., Prescott, A.R. and Sprent, J.I. (2005). Comparison of the host ranges of the beta-rhizobia *Burkholderia phymatum* and *Cupriavidus taiwanensis* LMG 19424. In unpublished proceedings of the 14th Australian Nitrogen Fixation Conference, ed. John Brockwell, Katoomba, NSW

² Spriggs, A.C. (2004) Symbiotic N₂ fixation in *Cyclopia* Vent. Spp. (honeybush): towards sustainable cultivation in the Western Cape of South Africa.Unpublished PhD thesis, University of Cape Town

NODULATED LEGUMES OF INDIA – A COMPILATION

K.V. MALLAIAH AND M. SRIDEVI

Mallaiah and Sridevi present this compilation of Indian legume nodulation records with the intention of stimulating further work on the subject, in particular to encourage authentication of earlier reports. *

Taxon	Status	Source
Abrus precatorius L.	+	29
Acacia acuminata Benth.	+	29
Acacia aneura F. Muell.	+	29
Acacia aruriculiformis A.Cunn. ex Benth.	+	4
Acacia benthamii Meisn.	+	56
Acacia berlandieri Benth.	+	29
Acacia catechu Willd.	+	10
Acacia concinna (Willd.) DC.	+	44
Acacia constricta Benth.	+	10
Acacia cyclopes A. Cunn. ex G.Don	+	29
Acacia drepanolobium Harms ex Sjöstedt	+	10
Acacia farnesiana (L.) Willd.	+	29
Acacia ferruginea DC.	+	26
Acacia greggii Gray	+	29
Acacia hockii De Wild.	+	10
Acacia holosericea A. Cunn. ex G.Don.	+	61
Acacia intsia Willd.	+	81
Acacia jaquemontii Benth.	+	29
Acacia lenticularis Buch. Ham. ex. Wall.	+	56
Acacia leucophloea (Roxb.) Willd.	+	81
Acacia ligulata Aiton ex Steudel	+	29
Acacia linifolia (Vent.) Willd.	+	29
Acacia nilotica (L.) Willd. ex Del.	+	10
Acacia nilotica (L.) Willd. ex Del. as Acacia arabica Willd.	+	29
Acacia mubica Benth.	+	10
Acacia pendula A.Cunn ex G.Don	+	29
Acacia pennata (L.) Willd.	+	81
Acacia planifrons Koenig ex Wight & Arn.	+	19
Acacia salicina Lindl.	+	10
Acacia sclerosperma F.Muell.	+	29
Acacia senegal (L.) Willd.	+	9
Acacia seyal Delile var. seyal	+	29
Acacia suma BuchHam. ex Wall.	+	19
Acacia sundra DC.	+	44
Acacia tortilis (Forssk.) Hayne	+	9
Acacia victoriae Benth.	+	10
Acrocarpus fraxinifolius Wight & Arn.	-	56
Adenanthera microsperma Teijsm. & Binn.	-	57
Aeschynomene aspera L.	+	98
Aeschynomene cristata Vatke	+	42
Aeschynomene indica L.	+	6
Albizia amara Willd.	+	44
Albizia chinensis (Osbeck.) Merr.	+	44
Albizia lebbeck (L.) Benth.	+	9
Albizia odoratissima (Willd.) Benth.	+	4
Albizia procera (Roxb.) Benth.	+	56
Albizia saponaria (Lour.) Bl.	+	54

Alysicarpus belgaumensis W.F. Wight	T +	82
Alysicarpus bupleurifolius (L.) DC.	+	44
Alysicarpus hamosus Edgew.	+	29
Alysicarpus heterophyllus (Baker) Jafri & Ali	+	44
Alysicarpus longifolius (Spreng.) Wight & Arn.	+	28
Alysicarpus tetragonolobus Edgew.	+	13
Alysicarpus vaginalis (L.) DC.	+	21
Alysicarpus. monilifera DC.	+	13
Arachis duranensis Krapov & W.C. Greg.		22
Arachis glabrata Benth.	+ +	22
Arachis hypogaea L.		3
	+	49
Arachis hypogaea L. subsp. fastifata Watdron as Arachis fastigata *	+	49
Arachis hypogaea L. var. vulgaris Harz Arachis marginuta Gardn.*		
	+	22
Arachis prostrata Benth.* Arachis villosa Benth.*	+	22
	+	
Argyrolobium flaccidum (Royle) Jaub. & Spach.	+	48
Astragalus graveolons Benth.	+	48
Astragalus leucocephalus Benth.	+	48
Atylosia lineata Wight & Arn.	+	81
Atylosia scarabaeoides (L.) Benth. Bauhinia alba*	-	79
	-	10
Bauhinia diphylla BuchHam.	-	81
Bauhinia galpinii N.E. Br.	-	54
Bauhinia purpurea L.	-	10
Bauhinia racemosa Lam.	-	81
Bauhinia tomentosa L.	-	44
Bauhinia vahlii Wight & Arn.	-	44
Bauhinia variegata L. var. candida (Aiton) Voigt.	-	10
Bolusanthus speciosus (Bolus) Harms	+	8 81
Butea monosperma (Lam.) Taub.	+	
Caesalpinia bonduc (L.) Roxb. as Caesalpinia bonducella (L.) Flem.	-	44
Caesalpinia pulcherrima (L.) Sw.	-	58
Cajanus cajan (L.) Huth.	+	64
Calliandra houstoniana (Mill.) Standl. var. calothyrsus as Calliandra	-	58
calothyrus Meissn.	+	32
Calopogonium mucunoides Desv.	T	32
Calopogonium pubescens*	+	58
Campylotropis eriocarpa (DC.) Schindl.	+	48
Campylotropis stenocarpa (Klotsch) Schindl.	<u> </u>	48
Campylotropis stenocarpa (Klotzsch) Schindl. as Lespedeza stenocarpa Maxim.	+	48
	+	50
Canavalia gladiata (Jacq.) DC.	+	48
Caragana brevispina Royle	+	68
Cassia fistula L.	T	00
Cassia javanica L. subsp. nodosa (Roxb.) K.Larsen & S.S. Larsen as Cassia nodosa BuchHam.	-	7
	+	63
Centrosema pubescens Benth. Chamaecrista absus (L.) H.S. Irwin & Barneby as Cassia absus L.	 	96
Chamaecrista absus (L.) H.S. Irwin & Barneby as Cassia absus L. Chamaecrista mimosoides (L.) Greene as Cassia mimosoides L.	+	51
	+	39
Chamaecrista pumila (Lam.) V. Singh	+	39
Chamaecrista pumila (Lam.) V. Singh as Cassia pumila Lam.	-	48
Chesneya cuneata (Benth.) Ali	+	36
Cicer arietinum L.	+	88
Cicer echinospermum*	1 '	00

Cicer pinnatifidum*	+	88
Cicer reticulatum*	+	88
Clitoria biflora Dalz.	+	13
Clitoria retusa*	+	83
Clitoria ternatea L.	+	36
	+	24
Codariocalyx motorius (Houtt.) H. Ohashi as. Desmodium gyrans DC. Colophospermum mopane Kirk ex J. Léonard	<u></u>	9
Crotalaria angulata Mill.	- +	101
Crotalaria burhia Buch Ham	+	29
	+	100
Crotalaria calycina Schrank	+ +	29
Crotalaria capensis Jacq.	+	13
Crotalaria filipes Benth.		82
Crotalaria hebecarpa (DC.) Rudd as Goniogyna hirta (Willd.) Ali.	+	
Crotalaria hebecarpa (DC.) Rudd as Heylandia latebrosa (L.) DC.)	+	39
Crotalaria hirsuta Willd.	+	44
Crotalaria juncea L.	+	36
Crotalaria laburnifolia L.	+	44
Crotalaria linifolia L.f.	+	75
Crotalaria nana Burm . f.	+	13
Crotalaria notonii Wight & Arn.	+	75
Crotalaria orixensis Willd.	+	13
Crotalaria pallida Aiton	+	15
Crotalaria retusa L.	+	69
Crotalaria verrucosa L.	+	75
Crotalaria vestita Bak.	+	13
Cyamopsis psoraloides DC.	+	73
Cyamopsis tetragonaloba (L.) Taub.	+	64
Dalbergia lanceolaria L.f.	+	83
Dalbergia lanceolaria L.f. subsp. paniculata (Roxb.) Thoth. as Dalbergia	+	81
paniculata Roxb.	+	81
Dalbergia latifolia Roxb.	+	47
Dalbergia melanoxylon Guill. & Perr. Dalbergia sericea G.Don	+	58
Dalbergia sissoo DC.	+	21
Dalbergia sissoo DC. Dalbergia sympathetica Nimmo	+	13
Delonix elata (L.) Gamble	+	81
Delonix regia (Hook.) Raf.	-	58
Derris robusta (Roxb. ex DC.) Benth.	+	29
Derris scandens (Roxb.) Benth.	+	81
Desmanthes virgatus (L.) Willd.	+	39
Desmannes virgatus (L.) wind. Desmodium diffusum (Willd.) DC.*	+	14
Desmodium elegans Benth.	+	18
Desmodium gangeticum (L.) DC.	+	29
Desmodium laxiflorum DC.	+	82
Desmodium nultiforum DC. Desmodium multiforum DC.	+	57
Desmodium sandwicense E. Mey.*	+	29
Desmodium tiliifolium (D.Don) G.Don	+	54
Dicerma biarticulatum (L.) DC.	+	83
Dichrostachys cineraria (L.) Wight & Arn.	+	29
Dichrostachys glomerata (E.) Wight & Airi. Dichrostachys glomerata (Forssk). Chiov*	+	10
Dichrostachys giomerata (Forssk). Chlov Dichrostachys nutans Benth.*	+	29
Enterolobium contortisiliquum (Vell.) Morong.	+	56
Erythrina abyssinica Lam.	+	54
Erythrina arborescens Roxb.	+	76
Erythrina blakei R.Parker	+	58
Li yuu uu uunet Kii ai Koi		

Erythrina caffra Thunb.		54
Erythrina fusca Lour. as E. glauca Willd.	+	
Erythrina indica Lam.	+	13
Erythrina indica Lam. as E. variegata L.	+	60
Erythrina parcelli*	+	60
	+	<u> </u>
Faidherbia albida (Del.) A.Chev. as Acacia albida Del.	+	56
Flemingia chappar Ham –Buch. ex. Benth.	+	100
Flemingia procumbens Roxb.	+	57
Geissaspis cristata Wight & Arn.	+	13
Geissaspis tenella Benth.	+	81
Genista cristata*	+	13
Gleditsia macrantha Desf.	-	58
Gliricidia maculata Kunth*	+	77
Gliricidia sepium (Jacq.) Steud	+	60
Glycine javanica L.*	+	91
Glycine max (L.) Merr.	+	64
Glycine soja Siebold & Zucc.*	+	87
Hardwickia binata Roxb.	-	56
Indigofera astragalina DC.	+	74
Indigofera cassioides DC.	+	44
Indigofera cordifolia Roth	+	39
Indigofera glandulosa Wendl.	+	82
Indigofera heterantha Brandis	+	48
Indigofera heterantha Brandis as Indigofera gerrardiana Harv.	+	1
Indigofera hirsuta Linn.	+	44
Indigofera hochstetteri Baker as Indigofera anabaptista Steud.	+	39
Indigofera linifolia (L.f.) Retz.	+	81
Indigofera linnaei Ali	+	104
Indigofera nummularifolia (L.) Alston as Indigofera echinata Willd.	+	74
Indigofera oblongifolia Forssk.	+	29
Indigofera prostata Willd.	+	81
Indigofera stipularis Link*	+	82
Indigofera tinctoria L.	+	36
Indigofera tinctoria L. as Indigofera summatrana Gaertn.	+	29
Indigofera trifoliata L.	+	44
Indigofera trifoliata L. var. duthei (Naik) Sanjappa as Indigofera duthei J.R.	+	74
Drum. ex Naik	ļ	
Indigofera trita L.f.	+	74
Indigofera zollingeriana Miq. as Indigofera teysmani Miq.	+	39
Lablab purpureus (L.) Sweet as Dolichos lablab L.	+	64
Lablab purpureus (L.) Sweet as Dolichos lablab var. lignosus	+	40
Lablab purpureus (L.) Sweet as Dolichos lablab var. typicus	+	40
Lathyrus aphaca L.	+	35
Lathyrus purpureus*	+	32
Lathyrus sativus L.	+	85
Lens culnaris Medik	+	86
Lespedeza juncea (L.f.) Pers. var. sericea (Thunb.) Lace & Hemsl. as Lespedeza	+	29
sericea (Thunb.) Benth.	1	10
Leucaena leucocephala (Lam) de Wit as Leucaena glauca (L.) Benth.	+	10
Leucaena leucocephala Lam.	+	10
Leucaena pulverulenta Benth.	+	27
Lotus corniculatus L.	+	67
Lotus hispidus Desf.	+	67
Lupinus albus L.	+	64
Lupinus angustifolius L.	+	29

Lupinus indica*	+	64
M. pruriens (L.) DC.	+	75
Macroptilium atropurpureum (DC.) Urban as Phaseolus atropurpureum Mc. &		
Sesse	+	79
Macroptilium lathyroides (L.) Urban as Phaseolus lathyroides L.	+	70
Macroptilium lathyroides (L.) Urban as Phaseolus psoralloides. Wight & Arn.	+	96
Macrotyloma uniflorum (Lam.) Verdc.	+	64
Medicago indica*	+	29
Medicago orbicularis (L.) Bartal.	+	89
Medicago polycerata Sauv. ex Trautv.	+	34
Medicago sativa L.	+	35
Medicago scutella (L.) Mill.*	+	89
Medicago truncatula Gaertn.*	+	39
Melilotus alba Medik.	+	93
Melilotus indicus (L.) All. as Melilotus parviflorum Desf.	+	99
Melilotus wolgica Poir.	+	89
Millettia indica (L.) Panigrahi as Derris indica (Lam.) Benth.	+	81
Millettia pinnata (L.) Panigrahi as Pongamia pinnata (L.) Pierre	+	95
Mimosa hamata Willd.	+	81
Mimosa pudica L.	+	76
Mimosa rubicaulis Lam.	+	84
Moullava spicata (Dalz.) Nicolson as Caesalpinia spictata Dalz.	-	81
Mucuna bracteata Kurz.	+	38
Mucuna cochinchinensis A.Chev.	+	29
Neptunia oleracea Lour.	+	71
Ohwia caudata (Thumb.) H. Ohashi as Desmodium laburnifolium (Poir.) DC.	+	83
Ougeinia oojeinensis (Roxb.) Hochr.	+	56
Parkia biglandulosa Wight & Arn.	+	26
Parkinsonia aculeata L.	-	7
Parochetus communis D.Don	+	31
Peltophorum africanum Sond.	-	56
Peltophorum dubium (Spreng.) Taub.	-	58
Peltophorum pterocarpum Backer ex K.Heyne	-	103
Peltophorum pterocarpum Backer ex K.Heyne as Peltophorum ferrugineum	_	10
(Decne) Benth.		10
Phaseolus coccineus L. as Phaseolus multiflorus Lam.	+	29
Phaseolus vulgaris L.	+	105
Pisum sativum L.	+	36
Pithecellobium dulce (Roxb.) Benth.	+	4
Pongamia glabra Vent.*	+	11
Prosopis chilensis (Mol.) Stuntz.	+	56
Prosopis chilensis (Molina) Stuntz as Prosopis siliquastrum DC.	+	29
Prosopis cineraria (L.) Druce	+	9
Prosopis julifera (Sw.) DC.	+	9
Psophocarpus tetragonolobus (L.) DC.	+	53
Psoralea corylifolia L. as Cullen corylifolia (L.) Medik	+	39
Pterocarpus marsupium Roxb.	+	23
Pterocarpus santalinus L.f.	+	62
Pueraria phaseoloides (Roxb.) Benth.	+	29
Pueraria phaseoloides (Roxb.) Benth. var. javanicus (Benth.) Baker	+	29
Rhynchosia hirta (Andr.) Meikle & Verdc.	+	44
Rhynchosia minima (L.) DC.	+	44
Rhynchosia rufescens (Willd.) DC.	+	44
I DI I - I - I C DC	+	44
Rhynchosia suaveolens (L.f.) DC. Rhynchosia velutina Wight & Arn.	+	101

Robinia pseudoacacia L.	+	56
Rothia indica (L.) Druce	+	15
Samanea saman (Jacq.) Merr.	+	103
Samanea saman (Jacq.) Merr. as Albizia saman	+	27
Samanea saman (Jacq.) Merr. as Pithecellobium. saman (Jacq.) Benth.	+	10
Saraca indica L.	-	44
Senna alata (L.) Roxb. as Cassia alata L.	 -	103
Senna auriculata (L.) Roxb. as Cassia auriculata L.	+	101
Senna montana (Roth.) V. Singh as C. montana Heyne ex Roth	+	83
Senna obtusifolia (L.) H.S. Irwin & Barneby	+	59
Senna obtusifolia (L.) H.S. Irwin & Barneby as Cassia obtusifolia L.	 	44
Senna occidentalis (L.) Link as Cassia occidentalis L.	+	68
Senna siamea (Lam.) H.S. Irwin & Barneby as C. siamea Lam.	-	56
Senna sulfurea (Collad.) H.S. Irwin & Barneby as Cassia glauca L.f.	 	56
Senna tora (L.) Roxb. as C. tora L.	+	80
Sesbania aculeata (Willd.) Poir.	+	65
Sesbania bispinosa (Jacq). W.F.Wight	+	30
Sesbania cannabina (Retz.) Pers.	+	45
Sesbania formosa F. Muell.*	+	102
Sesbania grandiflora (L.) Poir.	+	94
Sesbania macrocarpa Muhl.*	+	90, 92
Sesbania procumbens (Roxb.) Wight & Arn.	+	15
Sesbania rostrata Brem. & Oberm.	+	41
Sesbania sericea (Willd.) Link	+	25
Sesbania sesban (L.) Merr.	+	29
Sesbania sesban (L.) Merr. as Sesbania aegyptiaca Poir	+	14
Sesbania speciosa Taub.	+	65
Sesbania spinosa*	+	75
Sesbania tetraptera Hochst. ex Baker*	+	72
Shuteria densifolia Benth.	+	57
Shuteria involucrata (Walt.) Wight & Arn.	+	44
Smithia bigemina Dalz.	+	81
Smithia blanda Wall, as S. racemosa Heyne	+	82
Smithia capitata Dalz.	+	13
Smithia conferata Sm.	+	82
Smithia hirsuta Dalz.	+	82
Smithia purpurea Hok.	+	13
Smithia pycantha Baker	+	13
Smithia sensitiva Aiton	+	82
Smithia setulosa Dalz.	+	82
	+	100
Sophora mollis (Royle) Baker. Stylosanthes gracilis Taub.*	+	66
Stylosanthes gracuis Tauo. Stylosanthes guyanensis (Aubl.) Sw. is an orthographic variant of Stylosanthes	-1"	00
guianensis (Aubl.) Sw. is an orthographic variant of Siylosantnes	+	67
Stylosanthes hamata (L.) Taub.*	+	37
Stylosanthes humilis Kunth	+	67
Stylosanthes sympodialis Taub.*	+	2
Tadehagi triquetrum (L.) Ohashi subsp. pseudotriquetrum (DC.) H. Ohashi as	'	
Desmodium triquetrum subsp. pseudotriquetrum (L.) DC.	+	100
Tamarindus indica L.	-	7
Tawerniera cuneifolia (Roth) Arn.	+	7
Taverniera cuneijolia (Roth) Ath. Tephrosia apollinea (Delile) Link.	+	35
Tephrosia falciformis Ramasw.	+	29
Tephrosia pumila (Lam.) Pers. as T. purpurea var. pumila (Lam.) Baker	+	75
Tephrosia purpurea (Lam.) Pers. Tephrosia purpurea (Lam.) Pers.	+	79
Teprii ostu piir piir ed (Latti.) 1 ots.	1 '	

chrosia spinosa (L.f.) Pers. + chrosia strigosa (Dalz.) Santapau & Maheshw. as Tephrosia tenuis Wall.* + chrosia tinctoria (L.) Pers. as Tephrosia pulcherrima (Baker) Gamble + chrosia villosa (L.) Pers. + cramnus labialis (L.f.) Spreng. + termopsis barbata Royle + ifolium alexandrinum L. + ifolium glomeratum L. +	44 79 44 29 39 48 78 97 29 29 43 29 89 33
chrosia tinctoria (L.) Pers. as Tephrosia pulcherrima (Baker) Gamble + chrosia villosa (L.) Pers. + camnus labialis (L.f.) Spreng. + cermopsis barbata Royle + cfolium alexandrinum L. + cfolium glomeratum L. + cfolium glomeratum L.	44 29 39 48 78 97 29 29 43 29 89
phrosia villosa (L.) Pers. + ramnus labialis (L.f.) Spreng. + ermopsis barbata Royle + ifolium alexandrinum L. + ifolium glomeratum L. +	29 39 48 78 97 29 29 43 29 89
ramnus labialis (L.f.) Spreng. + ermopsis barbata Royle + folium alexandrinum L. + ifolium glomeratum L. +	39 48 78 97 29 29 43 29 89
ermopsis barbata Royle + Ifolium alexandrinum L. + Ifolium glomeratum L. +	48 78 97 29 29 43 29 89
folium alexandrinum L. + folium glomeratum L. +	78 97 29 29 43 29 89
folium glomeratum L. +	97 29 29 43 29 89
	29 29 43 29 89
ifolium hybridum I +	29 43 29 89
)	43 29 89
ifolium repens L. +	29 89
ifolium resupinatum L. +	89
ifolium subterraneum L. +	
igonella corniculata (L.) L. +	33
igonella foenum-graecum L. +	
igonella occulata Ser. +	50
igonella polycerata L.* +	35
raria picta (Jacq.) DC. +	96
cia faba L. +	16
cia hirsuta (L.) S.F. Gray. +	29
cia sativa L. var. angustifolia Ser. +	29
gna aconitifolia (Jacq.) Maréchal +	65
gna aconitifolia (Jacq.) Maréchal as Phaseolus aconitifolius Jacq. +	79
gna khandalensis (Santapau) Raghavan & Wadha +	82
gna marina (Burm.f.) Merr. +	55
gna mungo (L.) Hepper +	64
gna radiaae (L.) R. Wilczek var. setulosa (Dalz.) Ohwi & H. Ohashi as P.	12
blobtus Roxb.	12
gna radiata (L.) R.Wilczek +	64
gna radiata (L.) R. Wilczek var. mungo* +	10
gna radiata (L.) R.Wilczek var. setulosa (Dalz.) Ohwi & H.Ohashi as V.	82
diata (L.) R.Wilczek var. sublobata	02
gna radiate (L.) R. Wilczek var. aureus* +	20
gna umbellata (Thunb.) Ohwi & H.Ohashi +	17
gna umbellata (Thunb.) Ohwi & Ohashi as Phaseolus calcaratus Roxb. +	12
gna unguiculata (L.) Walp. +	36
gna. unguiculata (L.) Walp. as V. sinensis subsp. sesqueipedalis (L.) Verdc. +	29
vlia xylocarpa (Roxb.) Taub. +	44
ornia diphylla (L.) Pers. +	106
prnia gibbosa Span. +	81

Ed. note: Names were checked against and amended according to Kumar, S & Sane, P.V. 2003. Legumes of South Asia: A Check-List. Royal Botanic Gardens Kew. 536 pp. and the Internaional Plant Names Index. * denotes names not found in the Check-List.

GLEANINGS

CANE and students Swoboda and Watrous are studying the pollination ecologies of several herbaceous, perennial native legumes, specifically Astragalus filipes, Hedysarum boreale, Lupinus argenteus, Dalea ornata & D. searlsiae (and a more accessible surrogate for these last species, D. purpurea). Seed of these species is desired for plant community restoration at diverse spatial scales. The last species is currently farmed for prairie restoration on the North American Great Plains. Methods and protocols for farming the first five species are being developed, to produce literally tons of affordable seed to rehabilitate degraded plant communities in the Rocky Mountains (H. boreale) or the Great Basin of North America. None of these legumes is significantly autogamous, and outcrossing enhances seed production relative to self-pollination. They are primarily pollinated by bees, especially species of Osmia and lesser numbers of Bombus, Eucera, Megachile and other native species. Nest management methods are being developed for the more amenable and effective bee species to use on-farm for pollination of several of these legumes. (jcane@biology.usu.edu)

February 2006

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Ellison and LISTON are conducting molecular phylogenetic studies of the genus *Trifolium* and request samples (seeds or herbarium specimens) of the following species. If material is limited, we can use as little as a single leaflet, and have had success with specimens that are up to 50 years old. Please mail to: Dr. Nick Ellison, Grasslands Research Centre, AgResearch, Private Bag 11008, Palmerston North, New Zealand.

T. acutiflorum Morocco; T. angulatum SE Europe; T. ankaratrense Madagascar; T. antucoensis Chile; T. attenuatum S Rocky Mts, USA; T. bivonae Sicily; T. blancheanum Lebanon, Israel; T. caudatum Turkey; T. chlorotrichum Turkey; T. cinctum Balkan peninsula; T. congestum Balkan peninsula, Italy; T. daveauanum France; T. davisii Turkey; T. dichroanthoides Syria; T. dolopium Greece; T. elgonense Uganda, Kenya, Ethiopia; T. euxinum Turkey; T. gillettianum Cameroon; T. juliani Tunisia, Algeria; T. mauginianum Ethiopia; T. meironense Turkey, Israel; T. mucronatum SW USA, Mexico; T. pachycalyx Turkey; T. pilczii Balkan peninsula; T. radicosum Iran; T. roussaeanum Turkey; T. saxatile European Alps; T. sebastianii SE Europe - SW Asia; T. siskiyouense Oregon, USA; T. stipulaceum S. Africa; T. ukingense Tanzania; T. velenovskyi Balkan Peninsula; T. vestitum Chile; T. wentzelianum Tanzania; T. wettsteinii Balkan Peninsula. (listona@bcc.orst.edu)

GONCHAROV is interested in collaborating with others researching tribes Swartzieae and Sophoreae sens. lat. (mgonch@mail.ru).

HOLDEN is a PhD student whose thesis topic is the origin of the domesticated pea species *Pisum abyssinicum*, and its relationship to wild Pea species (david.holden@bbsrc.ac.uk)

MACKINDER and WIERINGA are collaborating on a project comprising a phylogenetic investigation and taxonomic revision of the heterogenus *Hymenostegia*, testing hypotheses of generic limits and correct placement of taxa, following a preliminary study to investigate the generic boundary between *Talbotiella* and *Hymenostegia* which suggested that several species currently accommodated in *Hymenostegia* were doubtfully correctly placed there. (B.Mackinder@rbgkew.org.uk)

MAXWELL, R.H. is revising a reviewed article for NOVON which contains nine new species of *Dioclea sens. lat.* and divides the genus into subgenera. (maxwell@ius.edu).

MAXWELL, R.H, L.P. de Queiroz and D.W.TAYLOR are collaborating on a project to recognize *Dioclea sens*. *lat* as several genera based principally on morphological data but also on the results of phylogenetic analyses of molecular data when available. (maxwell@ius.edu).

SPRENT announces a new project. A NERC-funded project awarded to Euan K James, Janet Sprent and others, in parallel with another project in York, is looking at the nodulation of *Mimosa* species in Brazil by β-rhizobia (especially species of *Burkholderia*). They have good collaboration with various scientists in Brazil, including Marcelo Simon, a *Mimosa* taxonomy specialist, currently studying for a PhD in Oxford with Colin Hughes. It appears that *Mimosa* species in many parts of the world nodulate, not with 'normal' rhizobia, which are in the α-branch of the Proteobacteria, but with bacteria from the β-branch. They should like to hear from anyone in other countries (especially parts of Asia and Madagascar) that have endemic *Mimosa* species who would like to collaborate by providing seed and/or desiccated nodules: see also publications by Chen et al., 2005 under Recent Legume Literature. (jisprent@aol.com)

VAN DER MAESEN is close to completing his accounts of the 3 subfamilies of Leguminosae, for the Analytical Flora of Benin, planned for publication later in 2006. He continues to work up *Flemingia* for Flora Malesiana, and the revision of the entire genus. His treatment of *Flemingia* and other Cajaninae for the pending volume of the Flora of Australia awaits publication. (Jos.vanderMaesen@wur.nl)

VAN DER MAESEN notifies Bean Bag readers that the Checklist of Gabonese Vascular Plants, Scripta Botanica Belgica 35, 2006, pp.438 co-authored by Sosef, WIERINGA and JONGKIND, has just been published in which the Caesalpinioideae account of 185 species was reviewed by WIERINGA (pp 206-229), the Mimosoideae account of 46 species was reviewed by JONGKIND (pp 229-233) and Papilionoideae account of 220 species was reviewed by VAN DER MAESEN (pp 233-249) (Jos.vanderMaesen@wur.nl).

VANDERBORGHT, is maintaining a Phaseoleae-Phaseolinae collection, chiefly centred on wild *Phaseolus* and *Vigna* species. Detailed data can be consulted at the following address: http://www.br.fgov.be/RESEARCH/COLLECTIONS/LIVING/PHASEOLUS (T.Vanderborght@br.fgov.be)

RECENT LEGUME LITERATURE

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